

Obituary

N. KESAVA PANIKKAR (1913-1977)

Our country has produced a number of scientists who have been responsible for moulding the scientific outlook of the country, in keeping with the needs and aspirations of a developing economy. It is in this context that the late Dr N. Kesava Panikkar would be remembered by posterity. Dr Panikkar has, for nearly three decades, dominated in the sphere of fisheries research and development in the Indian subcontinent.

Born on May 17, 1913 in Kottayam, Kerala, he had his early education in the local schools. Since then, during his graduate studies he came under the influence of one of the able Professors of the time, Prof. C. Lakshminarayanan of the Madras Christian College, Tambaram, from where he took his M.A. in Zoology in 1933. Besides being a good student, he was always keen on making direct observations of living organisms in their natural habitat and was a firm believer in the Louis Agassiz dictum—study nature and not books alone. It was thus during his field trips as part of the College curriculum that he developed an intensive fascination for the study of the process of physiological adaptation of aquatic organisms to the dynamic environment of the brackish waters. He actively pursued this problem throughout his research career, initiated and fostered under Professor R. Gopala Aiyar in the Zoological Research Laboratory of the Madras University. His work on the breeding of brackishwater animals of the Adyar estuary in the middle 30s has been an original approach to the problem of environmental ad-

aptation. His thesis on this and allied subjects fetched him the Doctor of Science Degree of the Madras University in 1938.

His academic records brought him the award of the prestigious 1851 Empire Exhibition Scholarship in 1938 and he worked in London, Plymouth and Cambridge for 5 years.

It was during his stay in the United Kingdom that he came in contact with some of the eminent biologists of the time, like Prof. E. J. Allen, Prof. A. V. Hill, Dr A. Krogh and others. Their work and broad approach to research problems have had a distinct influence on Dr Panikkar as has been clearly demonstrated in his own later publications. The classic work of Dr Panikkar on the osmotic regulation of some crustaceans, which he published from Plymouth, is a brilliant exposition and clearly reveals the skill and wide perspective of the individual in handling research material.

In 1943, Dr Panikkar was called upon to head the Department of Zoology of the University College, Trivandrum which post he held for nearly two academic sessions, until he was appointed as the Director of the Zoological Laboratory of Madras University. It was in 1946 that Dr Panikkar was chosen to organise the fisheries research and development activities of our country and he was appointed as the Officer on Special Duty to help in drawing up a Memorandum to the Government of India. After successfully completing this assignment, Dr Panikkar was absorbed into the newly created Central Marine Fish-

eries Research Institute. In his capacity as the Physiologist he had brought to play his brilliant academic background in successfully blending it with actual fisheries development programme. Thus, his approach on the physiological adaptation of organisms had given way to a number of basic studies relating to fish and prawn culture. Eventually, Dr Panikkar took over as the Director of this Institute in 1950 and later in 1957 he was appointed as the Fisheries Development Adviser to the Government of India. In this capacity he has been responsible for establishing separate organisations to deal with the technological aspects in fisheries, which have special bearing on fishery industry, education and management.

Gradually Dr Panikkar's horizon widened to encompass the larger field of marine sciences. During 1962-65 as the Director of the Indian Programme of the International Indian Ocean Expedition he was responsible for organising and co-ordinating the national oceanographic research programmes. At the successful culmination of this programme, which was the fore-runner of the establishment of the National Institute of Oceanography, Dr Panikkar was appointed as the Director of the Institute. When the National Commission on Agriculture was set up by the Government of India Dr Panikkar was the natural choice to be the Member for making suitable recommendations on the various aspects relating to

fisheries research, development, education and training. During the close of his tenure as the Member of the National Commission on Agriculture Dr Panikkar was appointed as the Vice-Chancellor of the University of Cochin. He was also the Chairman of the State Committee on Science and Technology and later a member of Kerala State Planning Board. Dr Panikkar has represented India in many International Conferences and has presided over several of the sessions.

Honours had come to Dr Panikkar from several quarters ever since he started his career. Apart from the Fellowship conferred on him by many Scientific Academies and the award of the Chandrakala Hora Memorial Medal, the most notable commendation was the National award of *Padmashri* for his valuable contributions to the cause of marine sciences and fisheries. His immense scientific and administrative capability, deep understanding of problems and, above all, his extreme humane considerations have endeared him to a large number of colleagues whom he has left behind. It is noteworthy that Dr Panikkar was an active worker until the last day of his life devoting himself to the cause which was dear to him. In the sudden passing away of Dr Panikkar at Trivandrum on the night of June 24, 1977, the scientific community has lost a very valuable and devoted friend.

R. RAGHU PRASAD